

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,992	03/24/2004	Rainer Schoenfeld	H 50058 HST 7745	
423 75	12/06/2006	•	• EXAMINER	
HENKEL CORPORATION			SELLERS, ROBERT E	
THE TRIAD, S			ART UNIT	PAPER NUMBER
GULPH MILLS	S, PA 19406		1712	
			DATE MAILED: 12/06/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Annication No.	(Applicant/a)			
	Application No.	Applicant(s)			
Office Action Comments	10/808,992	SCHOENFELD, RAINER			
Office Action Summary	Examiner	Art Unit			
	Robert Sellers	1712			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period who is a period of the provision	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 16 No.	ovember 2006.				
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL . 2b)⊠ This action is non-final.				
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) ⊠ Claim(s) <u>1-30</u> is/are pending in the application. 4a) Of the above claim(s) <u>2-5,7,11,12,14-17,23</u> 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1,6 and 8-10, 13, 18-22, 24 and 30</u> is/ 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or	<u>and 25-29</u> is/are withdrawn from are rejected.	consideration.			
Application Papers					
9) The specification is objected to by the Examiner					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)	,				
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:				

Application/Control Number: 10/808,992 Page 2

Art Unit: 1712

Claims 25-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Claims 2-5, 7, 11, 12, 14-17 and 23 are withdrawn as being directed to non-elected species. The elections were made **without** traverse in the non-Final rejection mailed June 23, 2006.

- 1. The 35 U.S.C. 102(b) and 103(a) rejections are withdrawn since the claimed polycarboxy-functionalized prepolymer of the structure depicted in independent claim 1 contains only one R¹ group representing the residue of a carboxy-, mercapto- or amino-functional elastomeric polymer, thereby precluding the polymeric repeating units of the references requiring the presence of at least two amino-terminated polyoxyalkylene (Myachajlowsky et al. Patent No. 5,552,254 and Japanese Patent No. 2000-75484) or polyalkylene glycol repeating units.
- 2. None of the cited prior art recites the claimed structure wherein -X- is -S-.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Application/Control Number: 10/808,992 Page 3

Art Unit: 1712

Claims 1, 6, 8-10, 13, 18-22, 24 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Speranza et al. Patent No. 5,093,382 (Speranza et al. '382)

3. Speranza et al. '382 (col. 15, lines 43-44, Product F) shows the reaction product of 1 mole of Jeffamine[®] D-200, the elected species of polyoxypropylene diamine (col. 9, lines 14-17) and 2 moles of the elected species of trimellitic anhydride having terminal carboxylic acid groups (col. 2, lines 38-47) which yields a structure within that claimed according to the reaction sequence in the Remarks/Arguments section of the amendment filed November 16, 2006 on page 9, the second paragraph.

Claims 1, 6, 8-10, 13, 18-22, 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Speranza et al. Patent No. 5,128,441 (Speranza et al. '441).

4. Speranza et al. '441 (col. 5, lines 7-14) discloses an intermediate condensation product having terminal carboxyl groups obtained by reacting a polyoxyalkylene diamine or triamine and a dicarboxylic acid or anhydride such as trimellitic acid (col. 6, lines 48-49). Although the intermediate condensation product derived from trimellitic acid is not exemplified, it would have been obvious to prepare it with the disclosed trimellitic acid based on its equivalency with the exemplified adipic acid (col. 12, Example 1, lines 36-37) established in column 6, lines 15 and 48-49.

Application/Control Number: 10/808,992

Art Unit: 1712

Claims 1, 9, 10, 13, 18, 19, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 4-89840.

5. The Japanese patent shows a COOH-terminated modified polyethylene glycol (Patent Abstracts of Japan) prepared by the reaction of polyethylene glycol and trimellitic anhydride (CAPLUS abstract).

Claims 1, 9, 10, 13, 18, 19, 21, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. Patent No. 5,885,723 and Rieder et al. Patent No. 4,172,802.

- 6. Takahashi et al. (col. 4, line 63 to col. 5, line 1) reports a carboxy-terminated polyalkylene glycol produced by reacting a polyvalent carboxylic acid such as trimellitic anhydride (col. 5, line 24) and a polyalkylene glycol.
- 7. Rieder et al. (col. 2, line 67 to col. 3, line 12) shows a general formula for a carboxylic acid group terminated diester yielded from the reaction of 2 moles of a tricarboxylic acid such as trimellitic acid or anhydride (col. 5, lines 18 and 53-54) and 1 mole of a secondary alcohol group terminated polyoxyalkylene diol (col. 5, lines 3-7).
- 8. Although the trimellitic acid or anhydride is not exemplified, it would have been obvious to prepare the carboxy-terminated polyalkylene glycols of Takahashi et al. and Rieder et al. with a particular polycarboxylic acid such as the disclosed trimellitic anhydride based on its equivalency with the exemplified sebacic acid (Takahashi et al., col. 17, lines 55-62) and fatty acid dimer (Rieder et al., col. 9, Example 1) set forth in Takahashi et al. (col. 5, lines 19 and 24, and Rieder et al. (col. 5, lines 18, 45 and 54).

Application/Control Number: 10/808,992 Page 5

Art Unit: 1712

9. Although the carboxyl-terminated polyoxyalkylene diamine-trimellitic anhydride or acid reaction products of the Speranza et al. patents, Japanese patent, Takahashi et al. and Rieder et al. are intermediates, they are viable, stable compounds regardless of their further use as reactants to form other polymers.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schoenfeld et al. Patent Noo. 6,998,011 (common applicant and same assignee) teaches the reaction product of epoxy resins and amin-terminated polyethers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

Robert Sellers
Primary Examiner

Art Unit 1712